Team Assignment: Data Exploration

Team Campbell

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Team Membership

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Assignment Details

Purpose

This assignment helped us become familiar with international data and information sources and make observations about economic development and investment conditions in different countries. Specifically, the countries compared here are China, Indonesia, and Korea.

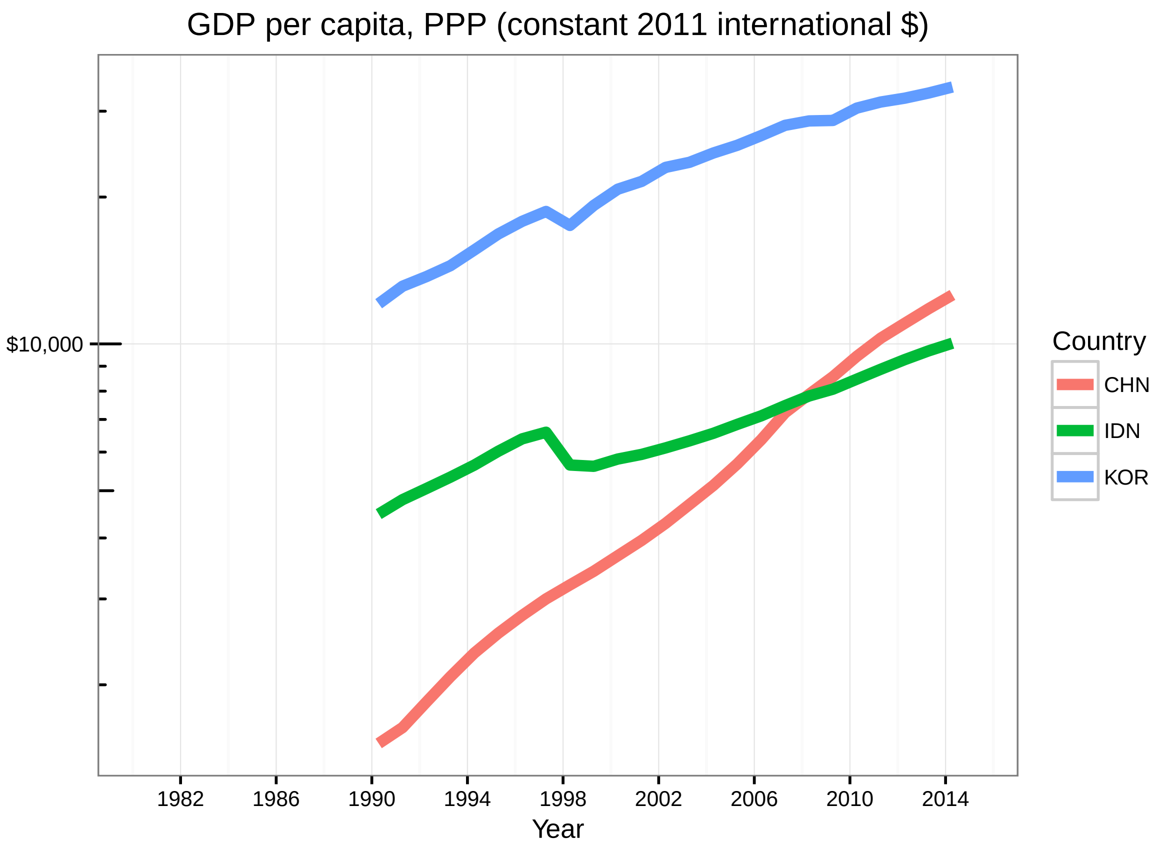
Process

Go to the World Bank's World dataBank website and select the "World Development Indicators and Global Development Finance" database. Extract the following data series for the countries in the sample for the years 1980-present and save them in an Excel file. For each variable, make a graph that compares the trends in the three countries since 1980. Note that some observations in dataset are missing. Those observations need to be blank in the worksheet; otherwise they will show up as zeros in graphs.

Please paste the graphs that you make on pages labeled accordingly below (2 points each):

1. GDP per capita, PPP (constant 2011 international $) (For graph, please use log form of this variable.)
2. Trade (% of GDP) (This is the sum of exports and imports as share of GDP.)
3. External balance on goods and services (% of GDP) (or trade deficit)
4. (Budget) Cash Surplus/Deficit (% of GDP)
5. Gross capital formation (% of GDP) (Same as gross investment.)
6. Foreign direct investment, net inflows (% of GDP)
7. GDP per unit of energy use (constant 2011 PPP $ per kg of oil equivalent)
8. Manufacturing, value added (% of GDP)

Plot 1



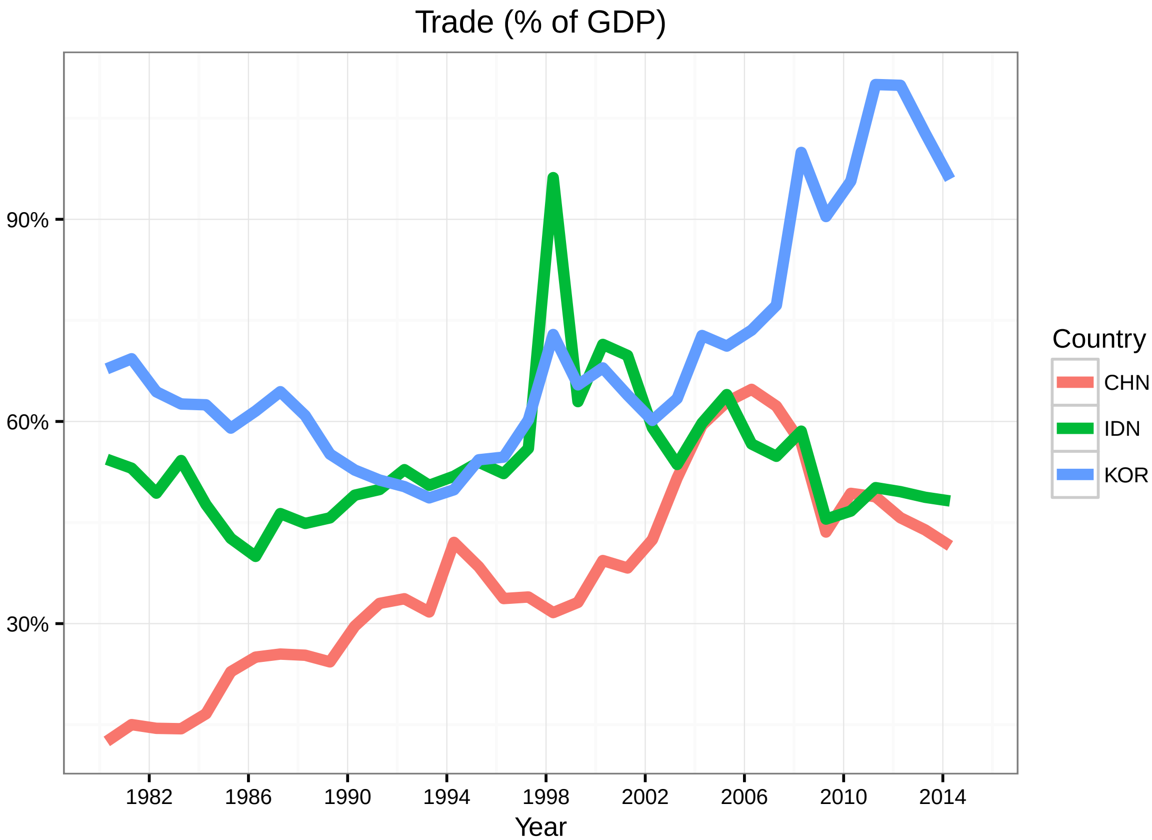
Description

GDP per capita based on purchasing power parity (PPP). PPP GDP is gross domestic product converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in constant 2011 international dollars.

Source

World Bank, International Comparison Program database.

Plot 2



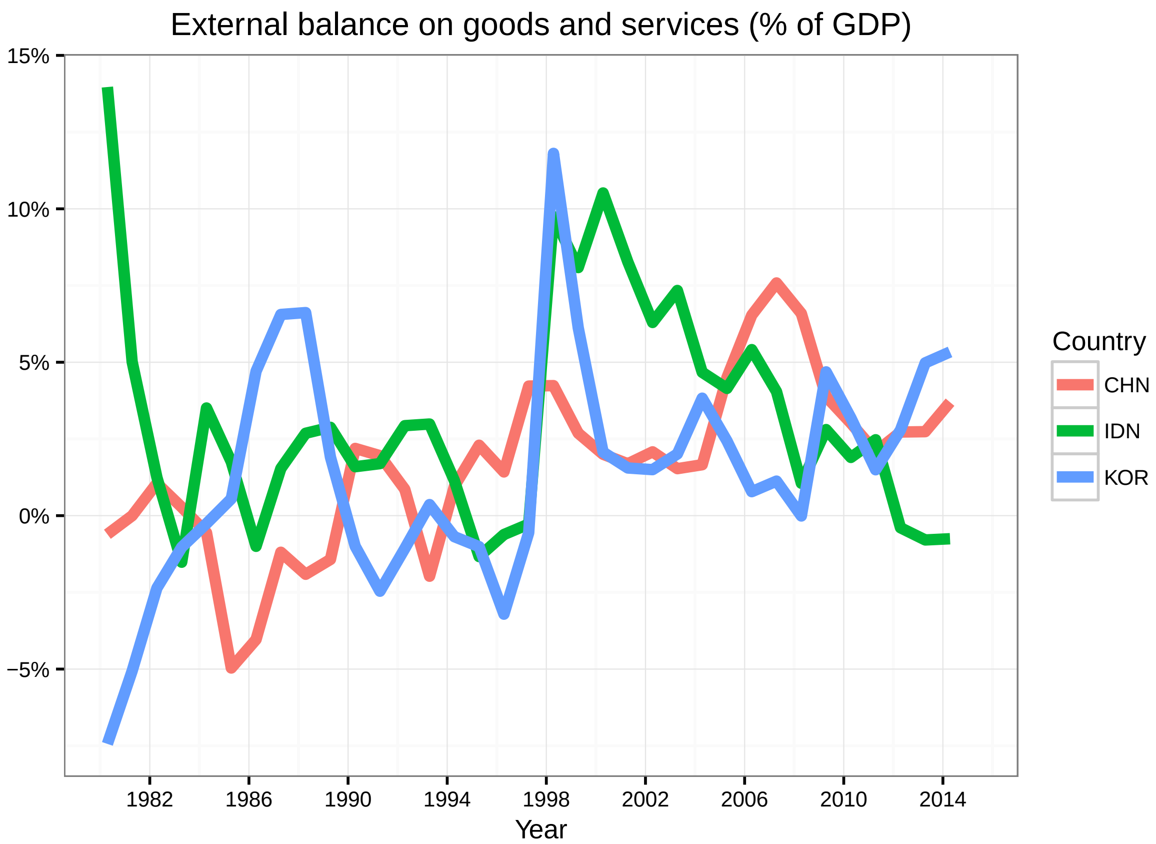
Description

Trade is the sum of exports and imports of goods and services measured as a share of gross domestic product.

Source

World Bank national accounts data, and OECD National Accounts data files.

Plot 3



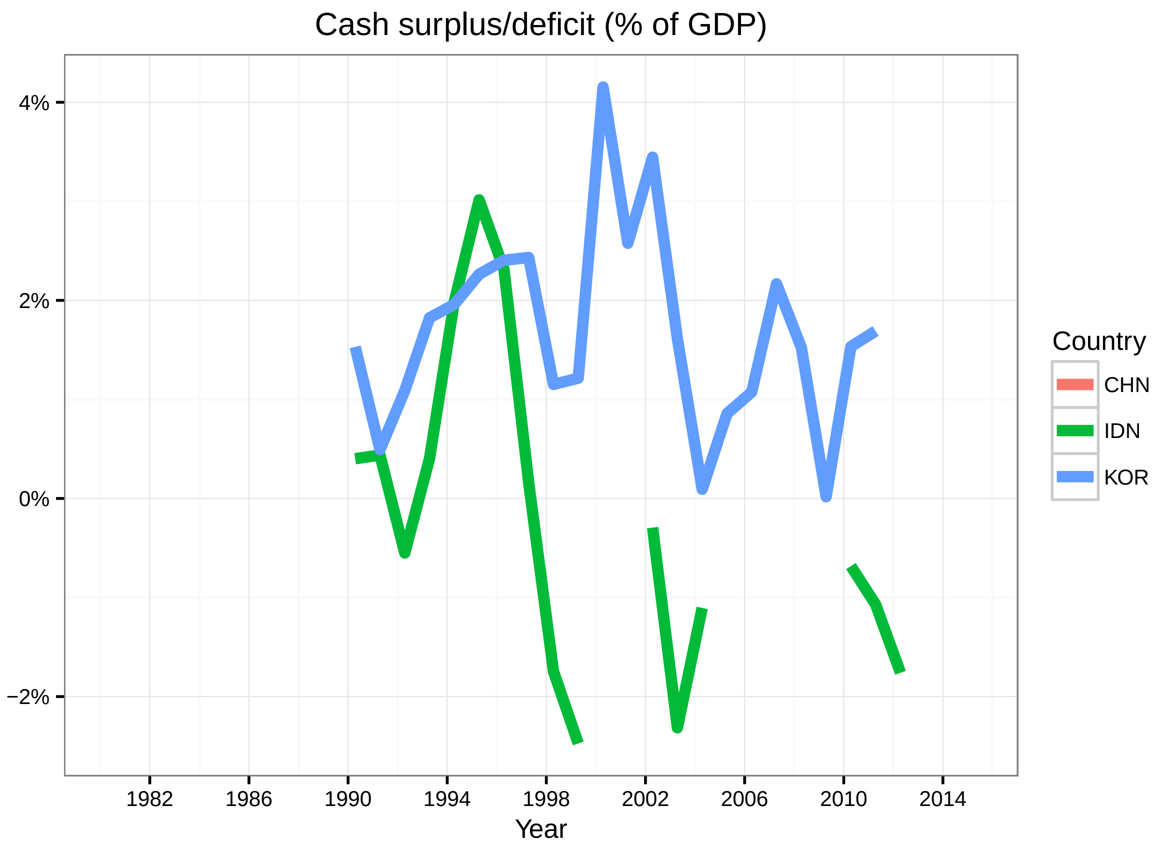
Description

External balance on goods and services (formerly resource balance) equals exports of goods and services minus imports of goods and services (previously nonfactor services).

Source

World Bank national accounts data, and OECD National Accounts data files.

Plot 4



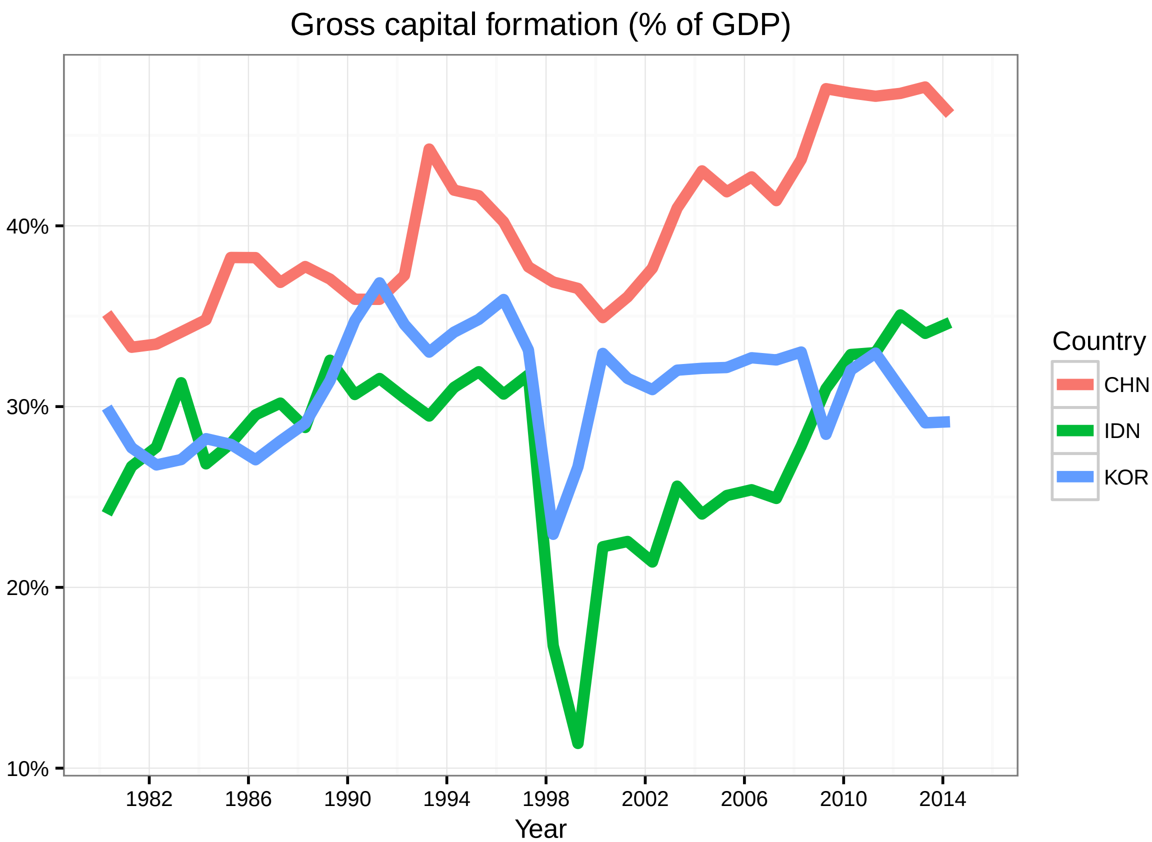
Description

Cash surplus or deficit is revenue (including grants) minus expense, minus net acquisition of nonfinancial assets. In the 1986 GFS manual nonfinancial assets were included under revenue and expenditure in gross terms. This cash surplus or deficit is closest to the earlier overall budget balance (still missing is lending minus repayments, which are now a financing item under net acquisition of financial assets).

Source

International Monetary Fund, Government Finance Statistics Yearbook and data files, and World Bank and OECD GDP estimates.

Plot 5



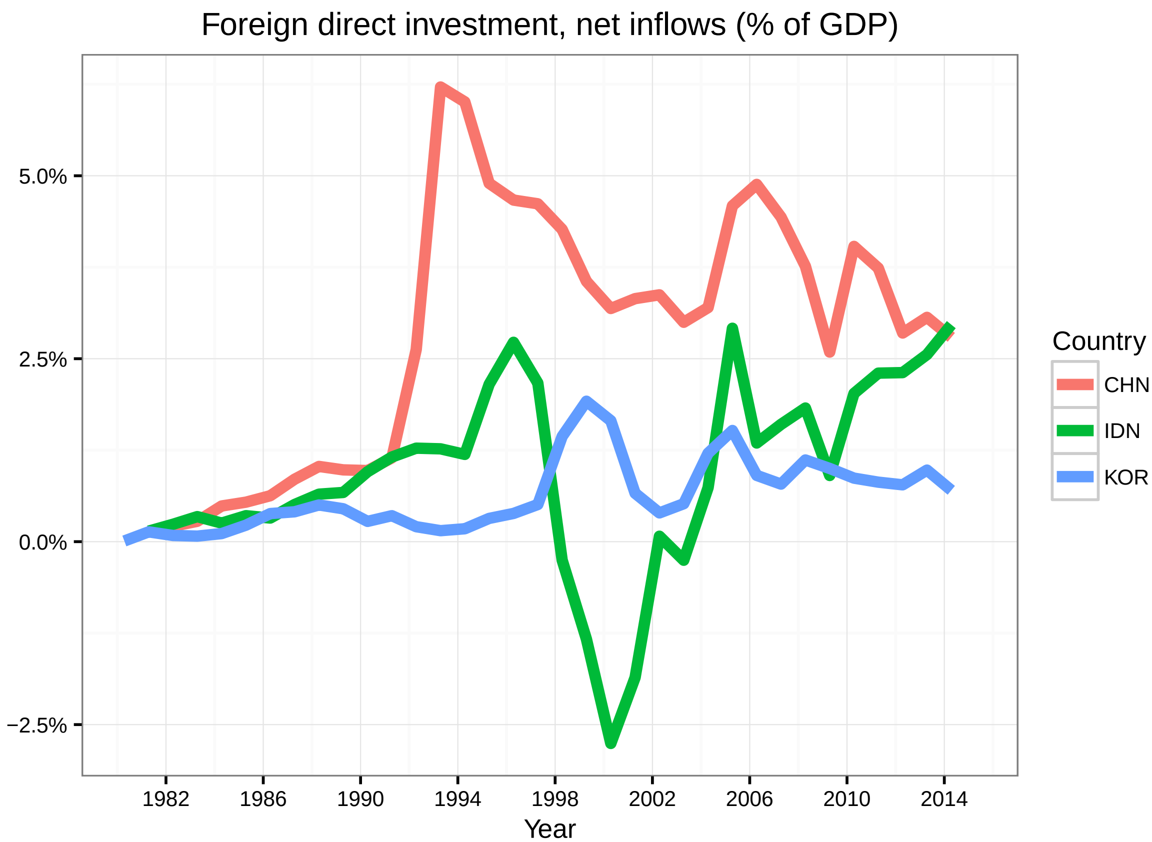
Description

Gross capital formation (formerly gross domestic investment) consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales, and work in progress. According to the 1993 SNA, net acquisitions of valuables are also considered capital formation.

Source

World Bank national accounts data, and OECD National Accounts data files.

Plot 6



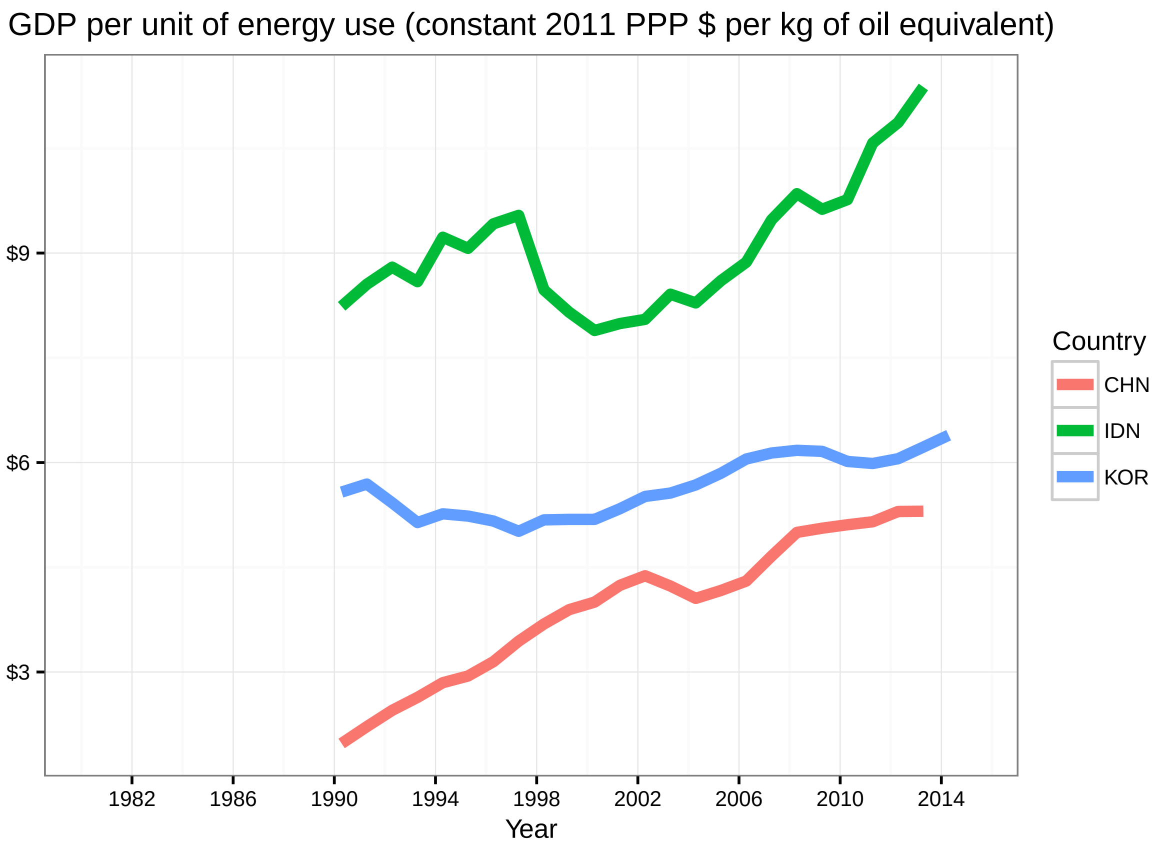
Description

Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors, and is divided by GDP.

Source

International Monetary Fund, International Financial Statistics and Balance of Payments databases, World Bank, International Debt Statistics, and World Bank and OECD GDP estimates.

Plot 7



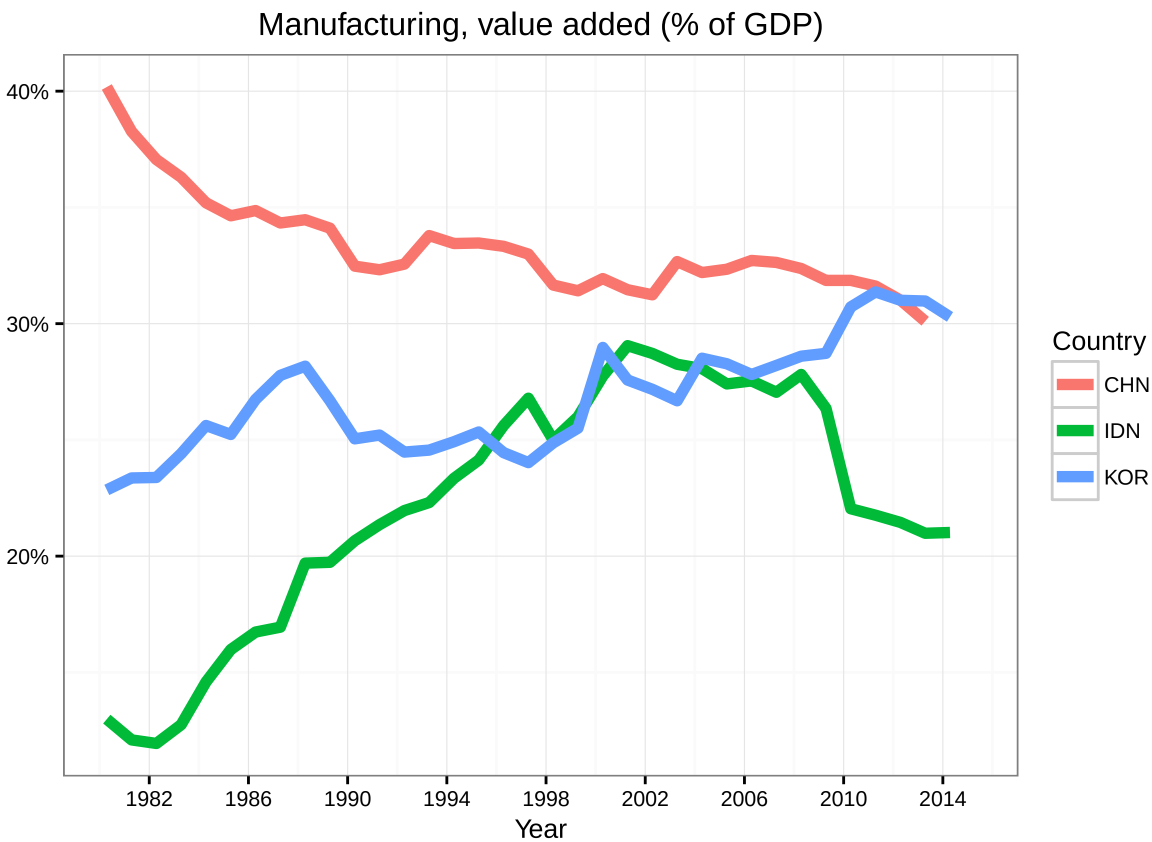
Description

GDP per unit of energy use is the PPP GDP per kilogram of oil equivalent of energy use. PPP GDP is gross domestic product converted to 2011 constant international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as a U.S. dollar has in the United States.

Source

IEA Statistics © OECD/IEA 2014 (http://www.iea.org/stats/index.asp), subject to https://www.iea.org/t&c/termsandconditions/

Plot 8



Description

Manufacturing refers to industries belonging to ISIC divisions 15-37. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3. Note: For VAB countries, gross value added at factor cost is used as the denominator.

Source

World Bank national accounts data, and OECD National Accounts data files.